



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,723	12/28/2000	Yuji Mizuguchi	2000-1776A	6779
513	7590	06/03/2004	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			CHANG, RICHARD	
2033 K STREET N. W.				
SUITE 800				
WASHINGTON, DC 20006-1021			ART UNIT	PAPER NUMBER
			2663	7

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No..

09/749,723

Applicant(s)

MIZUGUCHI ET AL.

Examiner

Richard Chang

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 11, 18-19, 24-26 and 29 is/are rejected.
- 7) ☒ Claim(s) 4-10, 12-17, 20-23, 27, 28 and 30-32 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding system claim 25: Claim 25 has a preamble for a data transmission system is vague and indefinite since it fails to point out all the subject matter to form a system.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 11, 18-19, 24, 26 and 29 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US patent No. 6,611,537 ("Edens et al").

Regarding claims 1, Edens et al teach a synchronous network for digital media streams 100 (A data transmission system) (See Fig. 1, Col. 13, lines 25-30) comprising a synchronous logical ring network providing fixed frames of information propagating

Art Unit: 2663

around the network at consistent time intervals wherein the frames contain the real-time continuous digital media streams as well as asynchronous data (a transmission line for transmitting isochronous data ... at an arbitrary timing) (See Col. 10, lines 55-66), a plurality of source network devices (plural source devices for ... the transmission line) (See Col. 13, lines 24-55), a destination device receiving information transmitted by these source devices propagates around logical ring network 120 (and at least one sink device ... to the transmission line) (See Fig. 1, Col. 14, lines 1-6), one of the competing devices is elected the network clock device to which all other devices are then synchronized and information will propagate consistently around the logical ring network at the frame rate (wherein a specific device which is one of the sink device ... the reference signal) (See Fig. 1, Col. 10, lines 8-22).

Regarding claims 11, Edens et al further teach new specific limitations for a synchronous network for digital media streams 100 comprising two lines ("A" and "B"), each of which could represent a twisted pair cable, a coaxial cable or other transmission medium (first and second transmission lines ... in one-to-one relationship) (See FIG. 4(b), Col. 21, lines 11-19), and the system command stream propagates along a "default network path" that reaches every network device and the data stream, however, can propagate along any available path, to provide for greater overall network bandwidth (a data transmission processing of transmitting ... on the first transmission line) (See Col. 10, lines 55-66 and Col. 11, lines 1-3).

Regarding claims 24, Edens et al further teach a transmitting method providing fixed frames of information propagating around the network at consistent time intervals wherein the frames containing the real-time continuous digital media streams

Art Unit: 2663

transmitted by these source devices as well as asynchronous data received by any appropriate destination device (A data transmission method for transmitting isochronous data to be processed ... to at least one sink device as a transmission destination of the isochronous data via a transmission line) (See Col. 110, lines 51-60), comprising transmitting synchronization marker from the network clock device and reproducing the header for a fixed-length frame of information (a data transmission step of transmitting reference signal ... the plural source devices to the transmission line) (See Col. 24, lines 57-63), and re-synchronizing frame header all other devices to the network clock device at a rate useful for synchronizing digital media streams (a signal reproduction step of receiving ... reproducing the reference signal in the plural source devices); (See Col. 27, lines 1-14).

Regarding claims 26, Edens et al further teach a network device which consistently transmitting and receiving real-time continuous digital media streams as well as asynchronous data around the network at the resynchronized fixed frame rate (A data transmission apparatus which is connected to ... an arbitrary timing via the transmission line) (See Fig. 1, Col. 10, lines 8-55) comprising logic synchronizing to the incoming signal extracting the data and system command streams from the incoming signal and converting them into several formats (a controller for controlling the transmission ... received as the asynchronous data.) (See Col. 27, lines 1-27).

Regarding claims 2, Edens et al further teach that the network clock device generates frame headers at a "frame rate", and by sending out a periodic frame header, the network clock device not only sends out a 44.1 kHz synchronization marker, but also creates the header for a fixed-length "frame" of information (the data transmission

Art Unit: 2663

on the transmission line is repeatedly ... to be included in the frame header) (See Col. 27, lines 1-27).

Regarding claims 3, Edens et al further teach that each frame is created in the first instance by the network clock device, which fills the frame with a frame header, a "system command" (the specific device periodically ... reference signal information) (See Col. 29, lines 55-67).

Regarding claims 18, Edens et al further teach that the wires may be of a different types even coaxial or fiber optic cable (wherein the transmission line is composed of an optical fiber) (See Col. 15, lines 52-60).

Regarding claims 19, Edens et al further teach that the physical star topology greatly increase overall network bandwidth (wherein the sink device and the source device transmit/receive data as an optical signal ... and the output terminals of the optical star coupler) (See Fig 2(b), Col. 15, lines 41-60).

Regarding to claim 29, this claim has limitations that is similar to those of claim 18, thus it is rejected with the same rationale applied against claims 18 above.

Allowable Subject Matter

5. Claims 4-10, 12-17, 20-23, 27-28, and 30-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and if no art rejection can be applied.

Art Unit: 2663

Conclusion

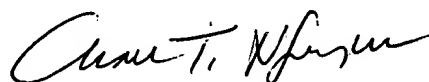
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is 703-605-4398. The examiner can normally be reached on Regular.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

	Richard Chang Patent Examiner Art Unit 2663
--	---

rkc



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600